TESTIMONY OF A. R. WATTS

FOR

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2001-2-E

IN RE: SOUTH CAROLINA ELECTRIC & GAS COMPANY

Annual Review of Base Rates for Fuel Costs

Q. WOULD YOU PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION?

A. A. R. Watts, 101 Executive Center Drive, Columbia, South Carolina. I am employed by The Public Service Commission of South Carolina, Utilities Department, as Chief of Electric.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by this Commission as a Utilities Engineer in the Electric Department and was promoted to Chief of the Electric Department in August 1981. I have been in my current position since October 1999. I have attended professional seminars relating to electric utility rate design, and have testified before this Commission in conjunction with fuel clause, complaint, territorial assignment, Siting Act, and general rate proceedings.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to summarize Staff's findings and conclusions as set forth in the Utilities Department's portion of the Staff Report.

Q. WHAT SPECIFIC AREAS WERE ENCOMPASSED BY STAFF'S EXAMINATION?

A. The Utilities Department's examination of the Company's fuel operations consisted of a review of the Company's monthly operating reports, review of the currently approved adjustment for fuel costs tariff, and review of the Company's short-term projections of kilowatt-hour sales and fuel requirements.

Q. DID STAFF EXAMINE THE COMPANY'S PLANT OPERATIONS FOR THE PERIOD?

A. Yes, we reviewed the Company's operation of its generating facilities, including special attention to the nuclear plant operations, to determine if the Company made every reasonable effort to minimize fuel costs.

Q. HAVE YOU DETERMINED THAT ANY SITUATIONS WARRANT DETERMINATION THAT THE COMPANY HAS ACTED UNREASONABLY IN OPERATING ITS FACILITIES AND THEREBY CAUSING ITS CUSTOMERS TO BE SUBJECT TO PAYING HIGHER FUEL COSTS?

A. No. Even though there were significant outages at the Company's V C Summer Nuclear Station and the coal-fired Cope plant during the period under review, Staff's examination indicated the Company had taken reasonable steps to safeguard against events resulting in plant downtime. The V C Summer Station was taken off line on October 7, 2000 for its scheduled refueling, maintenance and inspections. Inspections revealed an accumulation of boric acid near the piping between the reactor vessel and the "A" steam generator. After extensive testing and analysis, a 2 ½ inch crack through the weld in the 29 inch diameter pipe was discovered. Root cause analysis indicates the crack resulted from what is known as Primary Water Stress Corrosion Cracking. The Nuclear Regulatory Commission (NRC) found no performance deficiencies and the Company's root cause analysis was thorough and well done. The NRC inspection team confirmed that Code requirements had been met throughout the history of the weld. The NRC also found this failure was not avoidable by reasonable quality assurance measures or management controls and is considered to have resulted from matters beyond the Company's control. The unit returned to service on March 3, 2001.

The Cope plant outage began on January 3, 2001 when the unit tripped due to a ground fault through the generator. A crack in the cooling water piping inside the generator allowed hydrogen gas to enter the water cooling system, thereby reducing its cooling ability to the point of overheating, which in turn resulted in a short and the tripping of the unit. The cracking occurred due to a combination of factors including vibration induced fatigue, which was determined to be the result of the failure of the manufacturer to install a support block needed to minimize the effects of vibration on this component. Even with this problem, the major fossil units averaged over 95% availability for the majority of the period under review as indicated on Utilities Department Exhibit No. 1.

Q. WOULD YOU BRIEFLY EXPLAIN THE REMAINING UTILITIES DEPARTMENT'S EXHIBITS?

A. Exhibit Nos. 2A and 2B show the Company's nuclear and fossil unit outages for the months of March 2000 through February 2001, listing the plants by unit, duration of the outage, reason for the outage, and corrective action taken. Exhibit No.3 lists the Company's percentage Generation Mix by fossil, nuclear, and hydro for the period March 2000 through February 2001. Exhibit No. 4 reflects the Company's major plants by name, type of fuel used, average fuel cost in cents per KWH to operate, and total megawatt-hours generated for the twelve months ending February 2001. Exhibit No. 5 shows a comparison of the Company's original retail megawatt-hour estimated sales to the actual sales for the period under review. Exhibit No. 6 is a comparison of the original fuel factor projections to the factors actually experienced for the twelve months ending February 2001. The unusually large variances on this Exhibit for November 2000 through February 2001 are attributable to the unexpected outages at the V C Summer and Cope plants along with the much colder than normal weather experienced during the period. Exhibit No. 7 is a graphical representation of the data in Exhibit No. 6. Exhibit No. 8 is the Company's currently approved Retail Adjustment for Fuel Costs tariff. Exhibit No. 9 is a history of the cumulative recovery account. Exhibit No. 10A is a table of estimates for the cumulative

recovery account balance for various base level fuel factors for the period ending April 2002 including the entire cumulative account balance of $61,670,308. This produces an overall recovery factor of 1.730 cents per kilowatt-hour that is estimated to result in an ending period under collected balance of $22,454.

In addition, since the Company proposed to recover the under recovered balance over a two year period, Staff prepared an additional Exhibit No. 10B, which provides the resulting factors using the Company's methodology. This shows a fuel base factor of 1.579 cents per kilowatt-hour with a resulting under recovered balance of $58,473 in the cumulative recovery account. The currently approved base fuel factor is 1.330, and the Company proposed factor is 1.579 cents per kilowatt-hour.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.